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In the Matter of

Amendment of the Commission's Rules Concerning Low Power Radio and Automated Maritime Telecommunications System Operations in the 216-217 MHz Band

WT Docket No. 95-56

RM-7784

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To: The Commission - Mail Stop 1170

REPLY COMMENTS OF PHONIC EAR, INC.

- 1. <u>Introduction</u>. Phonic Ear, Inc. ("Phonic Ear") hereby submits these Reply Comments in the above-captioned proceeding. Phonic Ear is a leading manufacturer of auditory assistance devices and is the original proponent of allowing the operation of auditory assistance and other health care devices in the 216-217 MHz band.
- 2. Overwhelming support in initial comments. The initial comments filed in this proceeding 1/2 overwhelmingly support opening up the 216-217 MHz band for auditory assistance devices, thus confirming the point Phonic Ear made two years ago -- that there is an important and immediate need for spectrum relief for these devices outside the existing 72-

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 $[\]underline{1}$ / Phonic Ear located 13 sets of initial comments in the Commission's files. The parties whose comments Phonic Ear reviewed are listed in the certificate of service accompanying these Reply Comments.

76 MHz band. Not only manufacturers but also users of auditory assistance devices spoke in favor of the proposals.²/

- 3. Opposition of SEA, Inc. The only opposition to auditory assistance devices came from SEA, Inc., a narrowband commercial land mobile radio equipment manufacturer, which urged that the 216-217 MHz band be channelized at 5 kHz and that auditory assistance devices be excluded, presumably because they cannot operate with narrow bandwidths. With all due respect to SEA, the 220-222 MHz band is still not fully exploited by the land mobile industry some years after the first licenses in the band were issued, and there is plenty of room left there for developing new narrowband operations and applications. In contrast, the instant proceeding offers a special opportunity to take an action that is very important for people who really need the Commission's help and which is favored by law under the Americans with Disabilities Act. SEA's point of view must be rejected by the Commission.
- 4. Mahon & Patusky's request at 400 MHz. Phonic Ear takes strong exception to the position of Mahon & Patusky that 216 MHz technology will be only "interim" and that the needs of persons using auditory assistance devices can be fully met only at 400 MHz. It may be that desirable products may be developed at 400 MHz, but Phonic Ear is developing highly useful and long-term products to operate at 216 MHz. Importantly, Mahon & Patusky agrees with other commenters that the 216 MHz allotment should be made promptly, with an allotment at 400 MHz being taken up separately. Phonic Ear has no objection to future consideration of an allotment at 400 MHz.

^{2/} See the Comments of Self-Help for Hard of Hearing People, Inc. ("SHHH"), which were the only comments filed in this proceeding by a consumer organization.

- 5. Williams Sound's wideband channels. As is clear from its initial comments, Phonic Ear agrees with Williams Sound Corp. ("Williams") that quality auditory assistance devices will require wider bandwidths than 25 kHz. However, Phonic Ear does not feel as strongly as Williams that the Commission must actually set aside 50 kHz or 200 kHz channels as opposed to permitting users to combine adjacent 25 kHz channels to create the necessary bandwidth for certain products. The ability to combine channels should be sufficient and will allow more flexibility. Users who do not need wider bandwidths should be encouraged to stay within one 25 kHz channel.
- 6. Orion Telecom's wideband digital channels. Phonic Ear is very concerned about the impact of wideband digital emissions on analog auditory assistance devices. The presence of wideband digital signals can degrade the operation of auditory assistance devices in ways that make diagnosis, tracing of interference sources, and remedial action extremely difficult. As long as AMTS transmissions are on separate channels from auditory assistance devices and the emission mask is tight enough, Phonic Ear takes no position as to what AMTS operators should be permitted to do. However, considerable field testing is necessary before wideband digital transmissions should be permitted on LPRS channels.³/
- 7. <u>Dr. Trahos's PELTS</u>. Dr. Michael Trahos advocates the establishment of Personal Emergency Locator Service ("PELTS") in the 216-217 MHz band. Phonic Ear recognizes the value of PELTS but does not understand how a signal can be transmitted over a long distance, whether in a wilderness area or a city, within the power limitations for LPRS that are critical

^{3/} The Comments of SHHH stress the importance of preserving LPRS capacity for analog equipment.

both to successful auditory assistance operation and to avoid interference to television reception. Any consideration of PELTS should be deferred to a new proceeding or later phase of this proceeding and should not be undertaken without a more detailed explanation by the proponent of how the system will be compatible with LPRS and LETS operations.⁴/

8. ProNet's Campus Security Devices. Phonic Ear has no objection to the use of LETS facilities for the campus security system described by ProNet, Inc. ("ProNet") in its initial comments. Further, after discussions with ProNet, Phonic Ear wishes to modify the position taken at Paragraph 13 of its initial comments with regard to LETS systems such as ProNet's, which operate with very narrow bandwidth. As long as (and only if) the bandwidth and power level of a LETS system are comparable to ProNet's technical specifications, Phonic Ear believes that its auditory assistance systems and ProNet's LETS system can successfully share common spectrum and that systems such as ProNet's need not be limited to the two LETS channels. However, it is important that the two uses of the band be planned in a matter that maximizes compatibility. As noted at Paragraph 5, supra, Phonic Ear plans to manufacture equipment that combines two LPRS channels to achieve a bandwidth of 50 kHz, in order to meet the important audio fidelity needs of auditory assistance systems. There should be no problem if narrowband LETS systems operate in between auditory assistance channels; but "in between" two 25 kHz channels could end up being in the center of a 50 kHz channel, which could cause an interference problem. Therefore, if a LETS in a particular community requires more than the two LETS channels, the center frequency should be at the

^{4/} Phonic Ear takes no position as to whether PELTS should be permitted on channels reserved for AMTS links.

dividing line between each even numbered LPRS channel and the next odd-numbered channel, e.g., between Channels 4 and 5, 6 and 7, etc.

9. <u>Conclusion</u>. With so much support and enthusiasm expressed in the initial comments, and in light of the obvious need for relief, the Commission should expeditiously make the 216-217 MHz band available for auditory assistance, LETS, and other LPRS devices. However, consideration of other proposals must not slow a decision on the basic concepts already discussed in the *Notice of Proposed Rule Making* in this proceeding. Every day that goes by is a day when hundreds of thousands of people who could hear better are denied the ability to do so because of the limitations of currently available products. They should have to wait no longer. The Commission must find time on its busy agenda to act promptly.

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Respectfully submitted,

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August 17, 1995

CERTIFICATE OF SERVICE

I, Laura Ann Campbell, do hereby certify that I have, this 17th day of August, 1995, caused to be sent by first class United States mail, postage prepaid, copies of the foregoing "Reply Comments of Phonic Ear, Inc." to the following:

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